CURRICULUM VITAE

Name and Surname
 Date of Brith
 4th July 1963
 Title
 Professor

4. Education : BSc(Hons) Exeter, PhD Plymouth

| Degree | Department/Program | Institution | Year |
|-----------|---------------------------|--------------------------|------|
| BSc(Hons) | Mathematics and Computing | University of Exeter, UK | 1984 |
| PhD | Communication Engineering | Plymouth Polytechnic, UK | 1988 |

Title of the PhD Thesis and Supervisors: "Optimisation Techniques for Telecommunication Networks", supervised by Professor Peter Sanders and Dr. Colin Stockel

5. Academic Titles:

Date of Assoc. Prof. Dr. (UK 'Reader'):

Date of Prof. Dr:

'Professor of Network Algorithms'

'Professor of Computing Futures'

4th September 2004

31st July 2008

2008-2013

2013-2022

6. Thesis Administered

6.1 Research Master's Theses:

- 1. Robert Stockton, MPhil (2015); "Towards a taxonomy for privacy protection in online environments: developing methods for assessing and improving personal information security" (Supervisor) Glyndŵr University. Wales. UK.
- 2. Armando Roy Delgado, MPhil (2009); "Remote-controlled Home Automation Systems with Different Network Technologies" (Director of Studies) Glyndŵr University, Wales, UK.
- 3. Maksymilian Mulawa, MPhil (2009); "Defining Development Standards for Reusable User Interface Web Components" (Supervisor) Glyndŵr University, Wales, UK. Several more prior to 2005

6.2 PhD. Theses:

- 1. Ian Sturrock, PhD (2020); "Extrinsic and Intrinsic Motivators in Gameplay and Gameplay Design" (Director of Studies) Glyndŵr University, Wales, UK.
- 2. Mobayode Olusola Akinsolu, PhD (2019); "Efficient Surrogate Model-Assisted Evolutionary Algorithm for Electromagnetic Design Automation with Applications" (Supervisor) Glyndŵr University, Wales, UK.
- 3. Denise Oram, PhD (2018), "Towards a Framework for Ethical Compliance for Future Digital Technologies".(Supervisor) Glyndŵr University, Wales, UK.
- 4. Jim Birks, PhD (2017); "Design and Development of Innovative Non-linear Control and Deadtime Compensation Schemes for Improved Control in Water Treatment Processes" (Director of Studies) Glyndŵr University, Wales, UK.
- 5. Mathias Kreider, PhD (2017); "On Time, In Style; Nano-second Accuracy in Network Control Systems" (Director of Studies) Glyndŵr University, Wales, UK.
- 6. Debbie Garside, PhD (2017); "Human Visual Perception in Cyber Security Pseudo-Isochromatic CAPTCHA" (Supervisor) Glyndŵr University, Wales, UK.
- Leigh Campbell, PhD (2016); "Exploring the experiences of physiotherapy in North Wales for people with Multiple Sclerosis: informing service development and practice" (Supervisor) Glyndŵr University, Wales, UK
- 8. Olaolu Folorunsho, PhD (2015); "Towards a Model for Information Technology Development for Developing Nations" (Supervisor) Glyndŵr University, Wales, UK.
- 9. Alexia Robinet, PhD (2015); "A Usability Framework for the Design of Accessible Interfaces to Promote e-Inclusion" (Supervisor) Glyndŵr University, Wales, UK.
- 10. Nigel Houlden, PhD (2014); "The Practical Implementation of Optimal and Pseudo-Optimal Routing Algorithms" (Director of Studies) Glyndŵr University, Wales, UK.

- 11. John N. Davies, PhD (2014); "Improving Network Performance through Dynamic IP Filtering Techniques" (Director of Studies) Glyndŵr University, Wales, UK.
- 12. Paul Comerford, PhD (2014); "The Holistic Optimisation of Packet Filters Across a Domain" (Director of Studies) Glyndŵr University, Wales, UK. [Winner of the 'Lord Jones Prize for best PhD Dissertation, 2014]
- 13. Christian Benjamin Ries, PhD (2013); "UML for BOINC: A Modelling Language Approach for the Development of Distributed Applications based on the Berkeley Open Infrastructure for Network Computing" (Director of Studies) Glyndŵr University, Wales, UK.
- 14. Moniruzzaman Bhuiyan, PhD (2013); "A Gesture Controlled User Interface for Inclusive Design" (Supervisor) Glyndŵr University, Wales, UK.
- 15. Denis Kostenko, PhD (2012); "A Compound Algorithm for ERP Systems Hardware Selection" (Director of Studies) Glyndŵr University, Wales, UK.
- 16. Fatima Mansour, PhD (2011); "Holistic Visualisation of Distributed Knowledge" (Supervisor) Glyndŵr University, Wales, UK.
- 17. Mike Morgan, PhD (2010); "Optimisation Techniques for Wireless Networks" (Director of Studies) Glyndŵr University, Wales, UK.
- 18. Stuart Cunningham, PhD (2009); "Exploiting Musical Repetition for Data-reduced Audio Coding" (Director of Studies) Glyndŵr University, Wales, UK.
- 19. Mohammed Rezaul Karim, PhD (2007); "Estimating Long-range Dependent Self-similar Network Traffic: Performance evaluation and control" (Director of Studies) Glyndŵr University, Wales, UK. Several more prior to 2007.

7. Publications:

7.1. Articles in Refereed International Journals (SCI, SSCI, Arts and Humanities, SCI-E, ESCI)

- Sangodoyin, AO; Akinsolu, MO; Grout, V (2021) "Detection and Classification of DDoS Flooding Attacks on Software-Defined Networks: A Case Study for the Application of Machine Learning", IEEE ACCESS, 9 , pp.122495-122508.
- 2. Siddiquee, KNEA; Islam, MS; Grout, V (2020) "Detection, quantification and classification of ripened tomatoes: a comparative analysis of image processing and machine learning", IET IMAGE PROCESSING, 14 (11), pp.2442-2456.
- 3. Grout, V; Akinsolu, MO; Zaharis, ZD (2019) "Software Solutions for Antenna Design Exploration", IEEE ANTENNAS AND PROPAGATION MAGAZINE, 61 (3), pp.48-59.
- 4. Akinsolu, MO; Liu, B; Grout, V; Di Barba, P (2019) "A Parallel Surrogate Model Assisted Evolutionary Algorithm for Electromagnetic Design Optimization", IEEE TRANSACTIONS ON EMERGING TOPICS IN COMPUTATIONAL INTELLIGENCE, 3 (2), pp.93-105.
- 5. Grout, V (2019) "No More Privacy Any More?", INFORMATION, 10 (1).
- 6. Liu, B; Grout, V and Nikolaeva, A (2018) "Efficient Global Optimization of Actuator Based on a Surrogate Model Assisted Hybrid Algorithm", IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, 65 (7), pp.5712-5721.
- 7. Grout, V (2018) "The Singularity Isn't Simple! (However We Look at It) A Random Walk between Science Fiction and Science Fact", INFORMATION, 9 (4).
- 8. Liu, B; Irvine, A; Grout, V; Ali, N (2017) "GUI design exploration software for microwave antennas", JOURNAL OF COMPUTATIONAL DESIGN AND ENGINEERING, 4 (4), pp.274-281.
- 9. Grout, V (2017) "A Simple Approach to Dynamic Optimisation of Flexible Optical Networks with Practical Application", FUTURE INTERNET, 9 (2).
- 10. Cunningham, S and Grout, V (2014) "Data reduction of audio by exploiting musical repetition", MULTIMEDIA TOOLS AND APPLICATIONS, 72 (3), pp.2299-2320.
- 11. Picking, R; Grout, V; Blasco, R (2014) "E-servant: an intelligent, programmable system to support and integrate assisted living technologies", HEALTHCARE TECHNOLOGY LETTERS, 1 (2), pp.64-67.
- 12. Yan, YZ; Tu, WQ; Grout, V; Excell, P (2014) "A generalization of the Buckley-Osthus model for web graphs", DISCRETE MATHEMATICS, 320, pp.73-86.
- 13. Kreider, M; Bär, R; Grout, V; Wlostowski, T (2012) "Open borders for system-on-a-chip buses: A wire format for connecting large physics controls", PHYSICAL REVIEW SPECIAL TOPICS-ACCELERATORS AND BEAMS, 15 (8).
- 14. Picking, R; Robinet, A; Grout, V; Blasco, R (2012) "The Easyline+ project: evaluation of a user interface developed to enhance independent living of elderly and disabled people", UNIVERSAL ACCESS IN THE INFORMATION SOCIETY, 11 (2), pp.99-112.
- 15. Davies, JN; Comerford, P and Grout, V (2012) "Principles of Eliminating Access Control Lists within a Domain", FUTURE INTERNET, 4 (2), pp.413-429.
- 16. Dorrell, DG; Hsieh, MF; Grout, V (2011) "A Review of the Design Issues and Techniques for Radial-Flux Brushless Surface and Internal Rare-Earth Permanent-Magnet Motors", IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, 58 (9), pp.3741-3757.

- 17. Tu, WQ; Grout, V and Excell, P (2011) "Performance evaluation of split transmission in multihop wireless networks", MULTIMEDIA TOOLS AND APPLICATIONS, 54 (3), pp.589-607.
- 18. Picking, R; Robinet, A; Grout, V; Oram, D (2010) "A Case Study Using a Methodological Approach to Developing User Interfaces for Elderly and Disabled People", COMPUTER JOURNAL, 53 (6), pp.842-859.
- 19. Picking, R; Grout, V; Grout, H (2010) "Simplicity, Consistency, Universality, Flexibility and Familiarity: The SCUFF Principles for Developing User Interfaces for Ambient Computer Systems", INTERNATIONAL JOURNAL OF AMBIENT COMPUTING AND INTELLIGENCE, 2 (3), pp.40-49.
- 20. Grout, V; McGinn, J and Davies, J (2007) "Real-time optimisation of access control lists for efficient Internet packet filtering", JOURNAL OF HEURISTICS, 13 (5), pp.435-454.
- 21. Grout, V; Cunningham, S and Picking, R (2007) "Practical Large-Scale Network Design with Variable Costs for Links and Switches", INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY, 7 (7), pp.113-125.
- 22. Grout, V; Cunningham, S; Davies, J (2007) "Characterising ACLs by Rule Dependency: Effects on Optimisation Effectiveness", INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY, 7 (6), pp.10-16.
- 23. Rezaul, KM and Grout, V (2007) "On Reducing the Degree of Long-range Dependent Network Traffic Using the CoLoRaDe Algorithm", INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY, 7 (4), pp.80-86.
- 24. Rezaul, KM and Grout, V (2007) "Exploring the Reliability and Robustness of HEAF(2) for Quantifying the Intensity of Long-Range Dependent Network Traffic", INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY, 7 (2), pp.221-229.
- 25. Grout, V; Davies, J and McGinn, J (2007) "An argument for simple embedded ACL optimisation", COMPUTER COMMUNICATIONS, 30 (2), pp.280-287.
- 26. Grout, V (2005) "Principles of cost minimisation in wireless networks", JOURNAL OF HEURISTICS, 11 (2), pp.115-133.
- 27. GROUT, VM; SANDERS, PW and STOCKEL, CT (1989) "REDUCTION TECHNIQUES PROVIDING INITIAL GROUPINGS FOR EUCLIDEAN TRAVELING SALESMAN PATCHING ALGORITHMS", APPLIED MATHEMATICAL MODELLING, 13 (2), pp.110-114.
- 28. GROUT, VM and SANDERS, PW (1988) "COMMUNICATION-NETWORK OPTIMIZATION", COMPUTER COMMUNICATIONS, 11 (5), pp.281-287.
- 29. GROUT, VM; SANDERS, PW and STOCKEL, CT (1987) "PRACTICAL APPROACH TO THE OPTIMIZATION OF LARGE-SCALE SWITCHING-NETWORKS", COMPUTER COMMUNICATIONS, 10 (1), pp.30-38

7.2. Articles Published in Other Refereed Journals

- 1. Bruckbauer, A. & Grout, V., "Artificial Intelligence and Machine Learning for Efficient Minefield Clearance", Counter IED Report, Spring/Summer 2020.
- 2. Muirhead, J. & Grout, V., "Effective Age-Gating for Online Alcohol Sales", Alcohol Change UK, May 2020.
- 3. Grout, V., "Life's a RIoT with Spy vs Spy: Looking forward to the 'Real' Internet of Things, the 'Internet of Everything', 'Big Data' and 'Big Connectivity'", Internet of Things Journal, 2016.
- 4. Grout, V., "Smoke and Mirrors in Robotic Technocapitalism", Journal of Robotics and Automation, Vol. 4, 2016
- 5. Grout, V., "Identity Voyeurism", British Computer Society 'BCS ITNow' Magazine, September 2015, pp24-27.
- 6. Liu, B., Fernandez, F.V., Gielen, G., Karkar, A., Yakovlev, A. & Grout, V., "SMAS: A Generalized and Efficient Framework for Computationally Expensive Electronic Design Optimization Problems", in Computational Intelligence in Electronic Design (eds.), Springer, 2015, pp251-274.
- 7. Grout, V., "Robot Sex: Ethics and Morality", Lovotics, Vol. 3, e104, February 2015, doi: 10.4172/2090-9888.1000e104
- 8. Grout V. Shazam for People?. Journal of Robotics and Automation", Vol. 1. No. 1, 2014, pp1-4.
- 9. Grout, V. & Houlden, N., "Taking Computer Science and Programming into Schools: The Glyndwr/BCS Turing Project", Social and Behavioral Sciences Journal (Elsevier), Vol. 141, pp680-685, August 2014.
- 10. Ries, C.B. & Grout, V., "Code Generation Approaches for an Automatic Transformation of the Unified Modeling Language to the Berkeley Open Infrastructure for Network Computing Framework", International Journal of Soft Computing and Software Engineering, Vol. 3, No. 3, March 2013, pp177-186.
- 11. Davies, J. & Grout, V., "A Joined Up Framework for Identifying Dissertation Topics in a Technical Environment (Computer Networking)", in What is Research-Led Teaching? Multidisciplinary perspectives (eds. A. Miller, J. Sharp & J. Strong), CREST Guild of Higher Education, 2012.
- 12. Picking, R., Grout, V., McGinn, J., Crisp, J. & Grout, H., "Simplicity, consistency, universality, flexibility and familiarity: the SCUFF principles for developing user interfaces for ambient computer systems", in Innovative Applications of Ambient Intelligence (ed. K. Curren), IRMA/IGI, 2012, pp179-189.

- 13. Davies, J.N., Comerford, P., Grout, V., Rvachova, N. & Korkh, O., "Optimization Principles for Eliminating Access Control Lists within a Domain", Radioelectric and Computer Systems Scientific and Technical Magazine, Issue 6, 2012, pp208-213.
- 14. Davies, J.N., Comerford, P., Grout, V., Rvachova, N. & Korkh, O., "An Investigation into the Effect of Rule Complexity in Access Control Lists", Radioelectric and Computer Systems Scientific and Technical Magazine, Issue 5, 2012, pp33-38.
- 15. Roy Delgado, A., Blasco, R., Marco, A., Cirujano, D., Casas, R., Roy Yarza, A., Grout, V. & Picking, R., "Agent-based AmI System Case Study: The Easy Line + Project", in Trends in Practical Applications of Agents and Multiagent Systems (Eds. Yves, Demazeau, Frank Dignum, Juan M. Corchado, Javier Bajo, Rafael Corchuelo, Emilio Corchado, Florentino Fernández-Riverola, Vicente J. Julián, Pawel Pawlewski, & Andrew Campbell), Springer, 2011, pp157-164.
- Cunningham, S., Grout, V. & Picking, R., "Emotion, Content & Context in Sound and Music", In Grimshaw, M. (Ed), Game Sound Technology and Player Interaction: Concepts and Developments, IGI Global Publishing, 2010, pp235-263.
- 17. Tu, W. & Grout, V., "Performance Evaluation of The Split Transmission in Multihop Wireless Networks", in Future Multimedia Networking, Mauthe, A., Zeadally, S., Cerqueira, E., Curado, M. (eds.), Springer, 2009, pp72-82.
- 18. Cunningham, S. & Grout, V., "Emotion, Content and Context in Audio and Music", in Sound Technology and Player Interaction: Concepts and Developments (ed. M. Grimshaw), IGI Clobal, 2009.
- 19. Rezaul, K.M. & Grout, V., "Real-time Network Traffic Management using the Modified BPTraSha Algorithm", International Journal on Advances in Internet Technology, Vol. 1, No. 1, 2008, pp12-19.
- 20. Casas, R., Blasco Marín, R., Robinet, A., Roy Delgado, A., Roy Yarza, A., McGinn, J., Picking, R. & Grout, V., "User Modelling in Ambient Intelligence for Elderly and Disabled People", in Computers Helping People with Special Needs, Springer Lecture Notes in Computer Science (LCNS 5105), K. Miesenberger, J. Klaus, W. Zagler & A. Karshmer (eds.), July 2008, pp114-122.
- 21. Roy Delgado, A., Robinet, A., McGinn, J., Grout, V. & Picking, R. "Assistive Human-Machine Interfaces for Smart Homes", in 'Domotics: An Introduction', ICFAI University Press, October 2008.
- Roy Delgado, A., Picking, R. & Grout, V. "Remote-Controlled Home Automation Systems with Different Network Technologies", in 'Domotics: An Introduction", ICFAI University Press, October 2008.
 Rezaul, K.M. & Grout, V., "Estimating Long-Range Dependent Self-similar Network Traffic: Performance
- 23. Rezaul, K.M. & Grout, V., "Estimating Long-Range Dependent Self-similar Network Traffic: Performance of HEAF(2)", in Intelligent Engineering Systems and Computational Cybernetics, Editors: J. Tenreiro Machado, Bela Patkai, Imre J. Rudas, Springer Science-Business Media, 2008.
- 24. Rezaul, K.M. & Grout, V., "An Approach for Characterising Heavy-tailed Internet Traffic Based on EDF Statistics", in Intelligent Engineering Systems and Computational Cybernetics, Editors: J. Tenreiro Machado, Bela Patkai, Springer Science-Business Media, 2008, pp173-184.
- 25. Rezaul, K.M. & Grout, V., "A Comparison of Methods for Estimating the Tail Index of Heavy-tailed Internet Traffic", in Innovative Algorithms and Techniques in Automation, Industrial Electronics and Telecommunications, T. Sobh, K. Elleithy, A. Mahmood & M. Karim (eds.), Springer Netherlands, 2007, pp219-222.
- 26. McGinn, J., Picking, R., Picking, L. & Grout, V. "The Use of Interactive Visual Metaphors to Enhance Group Discussions using Mobile Devices", in "Universal Access to Ambient Interaction" (ed. C. Stephanidis), Springer, June 2007, pp952-960.
- 27. Roy Delgado, A., Robinet, A., McGinn, J., Grout, V. & Picking, R., "Assistive Human-Machine Interfaces for Smart Homes", in "Security, E-Learning, Internet and Networking" (eds. U.G. Bleimann, P.S. Dowland & S.M. Furnell), ISNRG, Plymouth, 2007, pp145-158.
- 28. Rezaul, K.M. & Grout, V., "Managing the Bursty Nature of Packet Traffic using the BPTraSha Algorithm", in "Security, E-Learning, Internet and Networking" (eds. U.G. Bleimann, P.S. Dowland & S.M. Furnell), ISNRG, Plymouth, 2007, pp249-266.
- 29. Morgan, M. & Grout, V., "Virtual Backbone Configuration in Wireless Mesh Networks", in "Security, E-Learning, Internet and Networking" (eds. U.G. Bleimann, P.S. Dowland & S.M. Furnell), ISNRG, Plymouth, 2007, pp231-248.
- 30. Roberts, N.J., Grout, V. & Worden, J.., "Adaptable and Collaborative Virtual Learning Environments Supporting Soft Skills", in "Security, E-Learning, Internet and Networking" (eds. U.G. Bleimann, P.S. Dowland & S.M. Furnell), ISNRG, Plymouth, 2007, pp83-98.
- 31. Cunningham, S. & Grout, V., "Advances in Similarity-Based Audio Compression", in "Security, E-Learning, Internet and Networking" (eds. U.G. Bleimann, P.S. Dowland & S.M. Furnell), ISNRG, Plymouth, 2007, pp129-144.
- 32. Grout, V., Picking, R., Cunningham, S. & Hebblewhite, R., "Compound Algorithms for Practical Large-Scale Network Optimisation", Applied Network Research, Vol. 6, No. 2, April 2006, pp220-229.
- 33. Grout, V. "Ne'er the Twain Shall Meet", Mathematics Today, the Institute of Mathematics and its Applications (IMA), Vol. 41, October 2005, pp157-160.
- 34. Grout, V. "Bridging the Network Optimisation Reality Gap", Network Potentials, October 2005, pp26-30.

- 35. Grout, V. "A Universal Optimisation Algorithm for Large Networks", Discrete Mathematics and Applied Optimisation, September 2005, pp303-311.
- 36. Grout, V, Houlden, N., Davies, J., McGinn, J. & Cunningham, S. "A Unified Framework for Optimal Routing", in "Integrated Systems for An Integrated Europe", (ed. K. Antlova), Liberci, 2004 (ISBN: 80-7083-881-7)
- 37. Grout, V. "Optimisation of Wireless Distribution for Broadband Networks", in Optimisation and Computation in the Networked World, (ed. H.K. Bhargava & N. Ye), Kluwer, 2003 (ISBN: 0-195-16169-8).
- 38. Grout, V., "Measuring Network Traffic: The Hidden Distribution", Mathematics Today, the Institute of Mathematics and its Applications (IMA), Vol. 37, No. 6, pp179-183, December 2001.
- 39. Clarke, S.J., Hu, Y. & Grout, V., "An Efficiency Metric for Real-Time Traffic Measurement and Control", Computational and Mathematical Modelling, Vol. 22, January 1998, pp19-26.
- 40. Shen, H.H. & Grout, V., "A New Architecture for Wireless Networks in Further and Higher Education", Topics in Networking, February 1998, pp35-48.
- 41. Grout, V., "A New Framework for Network Optimisation based on Reduction rather than Simplification of the Problem", Networks and Communication, Vol. 11, October 1995, pp304-319.
- 42. Grout, V., "The Computer Will Work it Out! (Common misconceptions regarding computational intractability)", Mathematics Review, December 1993, pp146-156.
- 43. Grout, V., "The Mathematics of Programming: The Limitations of Computers", Applied Computing and Control, July 1992, pp234-240.
- 44. Reynolds, B.L. and Grout, V., "Complexity Issues in Control Software Design", Control Engineering, Vol. 4, No. 1, 1992, pp45-53.
- 45. Grout, V. "On the Problems of Modelling Non-Poisson Network Traffic", Computational and Mathematical Modelling, Vol 13, September 1989, pp440-447.
- 46. Grout, V. "On the Effect of Truncating Call Arrival Times: Detecting a Negative Exponential Distribution", Data Communications Research, Vol. 14, No. 4., August 1989, pp457-464.
- 47. Grout, V., Sanders, P.W. & Stockel, C.T., "Large-Scale Telecommunication Network Optimisation", in Simulation and Optimisation of Large Systems, (ed. A.J. Osiadacz), Clarendon Press Oxford, May 1988 (ISBN: 0-19-853617-8

7.3. Reports Presented at the Scientific Meetings and Published in the Proceedings

- 1. Grout, V., "Why Isn't AI Ethics Happening? (A discussion of obstacles and attitudes towards ethical approaches to technology) 4th Digital Communication Symposium: Digital Transformation and Artificial Intelligence (CIDA 2024), November 28-30, 2024, Eastern Mediterranean University, Famagusta, North Cyprus [Accepted but withdrawn by author].
- 2. Davies, L., Vagapov, Y., Grout, V., Cunningham, S. & Anuchin, A., "Review of Air Traffic Management Systems for UAV Integration into Urban Airspace", 28th IEEE International Workshop on Electric Drives (IWED-2021), Moscow, 27-29 January 2021
- 3. Mognaschi, M.E., Liu, B., Akinsolu, M.O., Rashid, T.A., Rahman, C.M., Grout, V., Di Barba, P., Lazaridis, P.I., Ibrahim, G.J, Mistry, K.K. & Zaharis, Z.D., "Interactive Design Optimization of a Micro-Actuator Using Multi-Fidelity Numerical and Surrogate Models", Proceedings of the 18th IEEE Conference on Electromagnetic Field Computation (CEFC 2018), Hangzhou, China, October 28-31, 2018.
- 4. Skvortsva, M.A. & Grout, V., "Basic Approaches to Assessing Risks and Threats in Decision Support Systems", 2018 IEEE Conference of Russian Young Researchers in Electrical and Electronic Engineering (EIConRus 2018), Moscow/St. Petersburg, January 29-February 1, 2018.
- 5. Evgenevich, C.V., Fedosevich, K.S., Vladmirovich, M.D, Grigorevich, S.A. & Grout, V., "Elaboration of unit of azimuth acoustic correction system", 2018 IEEE Conference of Russian Young Researchers in Electrical and Electronic Engineering (EIConRus 2018), Moscow/St. Petersburg, January 29-February 1, 2018.
- 6. Grout, V., Houlden, N., Davies, J.N. & Cunningham, S., "Dynamic Optimisation of Flexible Optical Networks", Proceedings of the 7th International Conference on Internet Technologies and Applications (ITA 17), Wrexham, UK, September 12-15, 2017.
- 7. Derzhavin, O., Grout, V., Zhelbakov, I. & Sidorova, E., "On the Question of Decomposition of Multi-Timescale Systems Dynamic Models", Proceedings of the 7th International Conference on Internet Technologies and Applications (ITA 17), Wrexham, UK, September 12-15, 2017.
- 8. Proletarsky, A.V., Neusypin, K.A., Shen, K., Selezneva, M.S. & Grout, V., "Numerical Criteria for Degree of Observability of State Variables in Nonlinear Network Systems", Proceedings of the 7th International Conference on Internet Technologies and Applications (ITA 17), Wrexham, UK, September 12-15, 2017.
- 9. Liu, B., Irvine, A., Akinsolu, M., Arabi, O., Grout, V. & Ali, N., "GUI Interface Design Exploration Software for Microwave Antennas", Proceedings of the IEEE Conference on Computational Design and Engineering, 2017.

- 10. Skvortsova, M., Terekhov, V. & Grout, V., "A Hybrid Intelligent System for Risk Assessment based on Unstructured Data", 2017 IEEE Russian Young Researchers in Electronic Engineering Conference (EIConRusNW), Moscow, Russia, 1-3 February 2017.
- 11. Comerford, P., Davies, J.N. & Grout, V., "Reducing Packet Delay through Filter Merging", Proceedings of the IEEE/ACM International Symposium on Real-Time Data Processing for Cloud Computing (RTDPCC 2016), Shanghai, China, 6-9 December 2016.
- 12. Liu, B., Sun, N., Zhang, Q., Gielen, G. & Grout, V., "A Surrogate Model Assisted Evolutionary Algorithm for Computationally Expensive Design Optimization Problems with Discrete Variables", 2016 IEEE Congress on Evolutionary Computation 2016 (CEC 2016), Vancouver, Canada, 24-29 July 2016.
- 13. Grout, V., Houlden, N., Davies, J.N. & Cunningham, S., "Dynamic Optimisation of Flexible Optical Networks", Proceedings of the 11th International Network Conference (INC 2016), Frankfurt, Germany, 19-21 July, 2016.
- 14. Houlden, N. & Grout, V., "Expanded Taxonomies for Interior Routing Protocols: A Discussion", Proceedings of the 11th International Network Conference (INC 2016), Frankfurt, Germany, 19-21 July, 2016.
- 15. Cunningham, S., Davies, J.N., Houlden, N., Grout, V. & Picking, R., "Investigating Environmental Causes of TCP Retransmission and Flags in Wireless Networks", Proceedings of the 11th International Network Conference (INC 2016), Frankfurt, Germany, 19-21 July, 2016.
- 16. Htun, Y.Z., Romanuk, V.A. & Grout, V., "Phase Noise Minimization of Microwave Frequency Synthesizers by Circuit Optimization", Proceedings of the IEEE NW Russia Young Researchers in Electrical and Electronic Engineering Conference (2016 ElConRusNW), February 2-3, 2016, St. Petersburg, Russia, pp411-413.
- 17. Danielyan, N., Oram, D. & Grout, V., "Spacial Perceptions and Philosophical Issues in Internet Technologies", 1st IEEE Workshop on Social Implications of Technology, Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Wrexham, Wales, UK, September 8th-11th, 2015, pp522-525.
- 18. Bekhtin, Y., Krug, P., Lupachev, A., Zhelbakov, I. & Grout, V., "Classifying Algorithms for Train Barrier Recognition on the basis of Image Fusion Methods and Neural Networks", Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Wrexham, Wales, UK, September 8th-11th, 2015, pp263-267.
- 19. Lupin, S., Aung, S.M., Than, B.H. & Grout, V., "Algorithmic Aspects of Transport System Survivability Analysis", Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Wrexham, Wales, UK, September 8th-11th, 2015, pp70-74.
- Tevkun, M., Davies, J.N., Verovko, O. & Grout, V., "Performance Concerns when Implementing Infrastructure Security in IPv4/IPv6 Networks", Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Wrexham, Wales, UK, September 8th-11th, 2015, pp183-188.
- 21. Chistukhin, V.V., Lyalin, K.S., Merkulova, Z.V., Oreshkin, V.I. & Grout, V., "A Spatial Interference Filter System Breadboard on the Base of a Digital Beamforming Antenna", Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Wrexham, Wales, UK, September 8th-11th, 2015, 342-345.
- 22. Chegodaeva, J, Grout, V. & Ilyushechkin, V., "Raw Data Processing Procedures: A Review of Information Technologies in Quality Monitoring", Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Wrexham, Wales, UK, September 8th-11th, 2015.
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- 134. Mulawa, M., Picking, R. & Grout, V., "A Standard for Reusable User-Interface Design Components", Sixth BCS/IEE International Network Conference (INC 2006) University of Plymouth, UK, 11th-14th July 2006.
- 135.Morgan, M. & Grout, V., "Spanning Tree Objective Functions and Algorithms for Wireless Networks", IEEE Sarnoff Symposium, Princeton, New Jersey, USA, 27-28 March 2006.
- 136. Cunningham, S., Grout, V. & Bergen, H., "Mozart to Metallica: A Comparison of Musical Sequences and Similarities", Proceedings of the 18th International Conference on Computer Applications in Industry and Engineering (CAINE-2005), November 9-11, 2005 Honolulu, Hawaii, USA
- 137. Cunningham, S., Grout, V. & McGinn, J., "Play it Again, Babbage! A Framework to Exploit Musical Repetition for High Quality Audio Compression", Proceedings of IADIS International Conference WWW/Internet 2005, Lisbon, Portugal, 19th-22nd October 2005.
- 138.Xuewu, D., Grout, V., Haokun, T. & Jianguo, L. "Neural Network-Based Multi-Interest Information Filtering", Proceedings of the 1st BCS/IEE International Conference on Internet Technologies and Applications (ITA 05), Wrexham, North Wales, UK, 7th-9th September 2005, pp587-596.
- 139.Grout, V. & Houlden, N. "Principles of Optimal Interior Routing", Proceedings of the 1st BCS/IEE International Conference on Internet Technologies and Applications (ITA 05), Wrexham, North Wales, UK, 7th-9th September 2005, pp274-281.
- 140.Davies, J.N., Grout, V. & McGinn, J. "An Investigation into the Measurement of Delays through IP Networks", 1st BCS/IEE International Conference on Internet Technologies and Applications (ITA 05), Wrexham, North Wales, UK, 7th-9th September 2005.
- 141.Grout, V., "Optimisation Algorithms for Packet Processing: Bridging the Gap between Theory and Practice", Proceedings of IPSI-2005, Pescara, Italy, 27th July 1st August 2005.
- 142. Grout, V., "Initial Results from a Study of Probability Curves for Shortest Arcs in Optimal ATSP Tours with Application to Heuristic Performance", 20th British Combinatorial Conference (BCC 2005), University of Durham, UK, 10th-15th July 2005.
- 143. Grout, V., McGinn, J. & Davies, J. "Reducing Processing Latency in Network Packet Filters", Proceedings of the 5th BCS/IEE International Network Conference (INC 2005) Samos Island, Greece, 5th-7th July 2005
- 144.Grout, V. & McGinn, J. "Optimisation of Policy-Based Internet Routing using Access Control Lists", Proceedings of the 9th IFIP/IEEE Symposium on Integrated Network Management (IM 2005), Nice, France, 15th-19th May 2005.
- 145. Cunningham, S., Hebblewhite, R., Oram, D. & Grout, V. "Goodbye Mister Chips Hello Microchips: implications for the future of e-learning", Conference on E-learning in health and social care: theory to practice, University of Wales, NEWI, Wrexham, UK, 18th March 2005.
- 146.Grout, V., Houlden, N., Davies, J., McGinn, J. & Cunningham, S., "A Unified Framework for Optimal Routing", Proceedings of CSSI International Conference System Integration in Integrated Europe (ISIE), Liberec, Czech Republic, 8th-9th November 2004, pp177-187.
- 147. Cunningham, S., Hebblewhite, R., Oram, D. & Grout, V., "E-Learning: The Departure of the Human Factor in Education", Proceedings of IADIS International Conference WWW/Internet 2004, Madrid, Spain, 6th-9th October 2004, pp1235-1236.
- 148. Grout, V., Cunningham, S., Oram, D. & Hebblewhite, R., "A Note on the Distribution of Packet Arrivals in High-Speed Data Networks", Proceedings of IADIS International Conference WWW/Internet 2004, Madrid, Spain, 6th-9th October 2004, pp889-892.

- 149. Grout, V., Davies, J., Hughes, M. & Houlden, N., "A New Distributed Link-State Routing Protocol with Enhanced Traffic Load Distribution", Proceedings of BCS/IEE International Network Conference INC 2004, University of Plymouth, 6th-9th July 2004, pp165-172.
- 150.Grout, V., "Minimising Relays in Wireless Networks", Proceedings of BCS/IEE International Network Conference INC 2004, University of Plymouth, 6th-9th July 2004, pp55-62.
- 151.Hebblewhite, R., Cunningham, S. & Grout, V., "Computing for the New Generation", BCS/CPHC Conference on Grand Challenges in Computing Education, Gosforth Park, Tyneside, 29th-31st March 2004.
- 152. Grout, V. & McGinn, J., "Optimisation of Rule-Based Network Security Policies", CO 2004, Combinatorial Optimisation Conference, Lancaster University, 28th-31st March 2004.
- 153. Grout, V., "Scope and Resolution in Local-Search Optimization", CO 2004, Combinatorial Optimisation Conference, Lancaster University, 28th-31st March 2004.
- 154.Grout, V. & McGinn, J., "Complexity and Performance Issues in the Reordering of Internet Access Control Lists", Proceedings of the 7th INFORMS Telecommunications Conference, Boca Raton, Florida, USA, 7th-10th March 2004.
- 155. Grout, V., "A Self-Partitioning Link-State Routing Protocol", Proceedings of IEE/IEEE 3rd International Conference on Networking, ICN04, Gosier, Guadeloupe, French Caribbean, 1st-4th March 2004, pp619-621.
- 156.Grout, V., "The Minimal Connector Problem for Wireless Networks", Proceedings of IEE/IEEE 3rd International Conference on Networking, ICN04, Gosier, Guadeloupe, French Caribbean,1st-4th March 2004, pp270-277.
- 157. Grout, V., "A Distribution-Aware Partitioning Algorithm with Variable-Order Perturbation to Approximate Optimal Tours", Proceedings of the International Conference on Modeling and Optimization, MODOPT 2004, Temuco, Chile, 19th-22nd January 2004.
- 158.Grout, V., "An NP-Complete Problem in Wireless Networking: Theory and Practice" (Keynote Address), Proceedings of the International Conference on Modeling and Optimization, MODOPT 2004, Temuco, Chile, 19th-22nd January 2004.
- 159. Grout, V., "Towards an Optimal Routing Strategy", Proceedings of IADIS International Conference WWW/Internet 2003, Algarve, Portugal, November 5th-8th 2003, pp903-906.
- 160.Grout, V., "Optimization of Relay Location and Connectivity in Wireless Broadband Distribution Networks", Proceedings of IEEE SoftCOM 2003, International Conference on Software, Telecommunications and Computer Networks, Split/Dubrovnik/Ancona/Venice, Croatia/Italy, 7th-10th October 2003, pp111-117.
- 161.Grout, V., "An Algorithm for the Optimization of Broadband Wireless Distribution Point Location", Proceedings of 3rd McMaster Optimization Conference: Theory and Applications, MOPTA 03, Hamilton, Ontario, Canada, 30th July 1st August 2003.
- 162.Grout, V., "A Compound Algorithm for the Optimization of Broadband Wireless Distribution", INFORMS Computing Society Conference on Optimization and Computation in the Network Era, Chandler, Phoenix, Arizona, USA, 8th-10th January, 2003.
- 163. Grout, V., "Seeding a Broadband Distribution Network", Second IMA Conference on Mathematics in Communications, Lancaster University UK, 16th-18th December 2002.
- 164.Grout, V., "Complexity of Local-Search Heuristics and Metaheuristics for Broadband Connectivity Anakysis", 1st Combined Conference on Computing and Control, Wrexham, UK, July 2001, pp294-299.
- 165.Grout, V., "Local-Search Algorithms for Topological Network Design Problems", Proceedings of BASE-2000, May 2000, pp15-19.
- 166. Grout, V., "Tabu-Search for Network Design: An analysis of complexity issues and limitations", Proceedings of the South-West Operations Research Group (SWORG-99), August 1999, pp233-236.
- 167.Hands, N.J. & Grout, V., "Finding Bounds for Greedy Algorithm Errors in Network Design", Proceedings of the South-West Operations Research Group (SWORG-98), September 1998, pp130-137.
- 168.Hands, N.J. & Grout, V., "Fast Search Algorithms for Network Design", Proceedings of BASE-1998, October 1998, pp45-50.
- 169.Hands, N.J. & Grout, V., "General Reduction Algorithms for Optimisation of Large Systems", Proceedings of SWNet-1997, September 1997, pp80-88.
- 170.Grout, V., "Practical Least-Cost Interconnection Algorithms for Data Networks", Proceedings of the 2nd IMA Conference on Mathematics and Communications, University of Reading, UK, September 1996.
- 171.Grout, V., "Algorithmic Complexity in Network Optimisation Processes", Proceedings of the 1st IMA Conference on Mathematics and Communications, University of Reading, UK, September 1994.
- 172.Fern, T.G.. & Grout, V., "A Quality-Assured Approach to Real-Time Software Development", Proceedings of BASE-91, November 1991, pp56-61.
- 173. Patel, A., Fern, T.G. & Grout, V., "Formal Methods of Software Quality Development, Implementation and Testing", Proceedings of SWNet-1991, July 1991, pp23-28.
- 174.Patel, A. & Grout, V., "Software Optimisation for Real-Time Systems", Proceedings of BASE-90, June 1990, pp333-338.

- 175. Grout, V., "Network Modelling, Simulation and Optimisation", Proceedings of the South-West Operations Research Group (SWORG-89), June 1989, pp110-114.
- 176. Grout, V., "Network Optimisation: Algorithms and Complexity", Proceedings of the South-West Operations Research Group (SWORG-87), June 1987, pp56-63.
- 177. Grout, V., Sanders, P.W. & Stockel, C.T., "Telecommunication Network Optimisation", IMA Conference on Simulation and Optimisation of Large Systems, University of Reading, 10th-12th September 1986.

7.4. Written international books and book chapters

- 1. Grout, Vic, 'Prometheus for Sale', Serailised from April 2025 (https://prometheus.forsale/)
- 2. Houlden, N. & Grout, Special Issue of Big Data and Cognitive Computing ("Advanced Machine Learning and Data Mining: A New Frontier in Artificial Intelligence Research"), MDPI, June 2021 (ISSN: 2504-2289).
- 3. Grout, Vic, 'Conscious', (Third Edition) Clear Futures Publishing, 2019 (ISBN: 978-1-0819-3913-7).
- 4. Picking, R., Cunningham, S., Houlden, N., Oram, D., Grout, V. & Mayers, J. (eds.), Proceedings of the Seventh International Conference on Internet Technologies and Applications (ITA 17), Glyndŵr University, 2017.
- 5. Picking, R., Cunningham, S., Houlden, N., Oram, D., Grout, V. & Mayers, J. (eds.), Proceedings of the Sixth International Conference on Internet Technologies and Applications (ITA 15), Glyndŵr University, 2015.
- 6. Picking, R., Cunningham, S., Houlden, N., Oram, D., Grout, V. & Mayers, J. (eds.), Proceedings of the Fifth International Conference on Internet Technologies and Applications (ITA 13), Glyndŵr University, 2013 (ISBN: 978-0-946881-81-9).
- 7. Grout, V & Picking, R., Special Issue of Future Internet (Selected Papers from ITA 11), MDPI, March 2012 (ISSN: 1999-5903).
- 8. Dowland, P.S., Grout, V., Humm, B. & Knahl, M.H. (eds.), Proceedings of the Seventh Collaborative Research Symposium on Security, E-learning, Internet and Networking (SEIN 2011) University of Plymouth, 2011 (ISBN: 978-1-84102-295-6).
- 9. Grout, V., Picking, R., Oram, D., Cunningham, S. & Houlden, N. (eds.), Proceedings of the Fourth International Conference on Internet Technologies and Applications (ITA 11), Glyndŵr University, 2011 (ISBN: 978-0-946881-68-0).
- 10. Bleimann, U.G., Dowland, P.S., Furnell, S.M. & Grout, V. (eds.), Proceedings of the 5th Research Symposium on Security, E-Learning, Internet and Networking, CISNR, 2009 (ISBN: 978-1-84102-236-9).
- 11. Cunningham, S., Grout, V., Houlden, N., Oram, D. & Picking, R. (eds.), Proceedings of the 3rd International Conference on Internet Technologies and Applications (ITA 09), Glyndŵr University, 2009 (ISBN: 978-0-946881-65-9)
- 12. Bleimann, U.G., Dowland, P.S., Furnell, S.M. & Grout, V. (eds.), Proceedings of the 4th Research Symposium on Security, E-Learning, Internet and Networking, CISNR, 2008 (ISBN: 978-1-84102-196-6).
- 13. Rezaul, K.M. & Grout, V., The Fractal Internet: Estimation and control of long-range dependent traffic, NEWI, November 2007 (ISBN: 978-0-946881-57-4).
- 14. Grout, V. (ed.), Optimising the Internet: Key Topics in Modern Network Algorithms, NEWI, 2007 (ISBN: 978-0-946881-55-0).
- 15. Grout, V., Oram, D. & Picking, R. (eds.), Proceedings of the Second International Conference on Internet Technologies and Applications (ITA 07), September 4-7 2005, Wrexham, UK, NEWI, 2007 (ISBN: 978-0-946881-54-3).
- 16. Grout, V. & Cunningham, S., Universal Optimisation Algorithms for Large Networks, NEWI, 2007 (ISBN: 978-0-946881-50-5).
- 17. Grout, V., Oram, D. & Picking, R. (eds.), Proceedings of the First International Conference on Internet Technologies and Applications (ITA 05), September 7-9 2005, Wrexham, UK, NEWI, 2005 (ISBN: 0-94688-132-4).
- 18. Grout, V. Problem-Solving Programming: An introduction to algorithmic design, NEWI, 2004 (ISBN: 978-0-946881-56-7).
- 19. Grout, V. & Davies, K.L., Efficient Optimisation of Large-Scale Industrial Control Systems, DataWest Systems Ltd, 1994.
- 20. Grout, V., Traffic Measurement in Value-Added Packet-Switched Networks, Istel Communications, 1990. **7.8 Other Publications**
- 1. KEYNOTE ADDRESSES, PUBLIC AND INVITED TALKS & EDITORIAL PAPERS
- 2. Grout, V. (Opening Address), "AI and Art (Can AI Do Art?)", Arkin University of Creative Arts and Design Academic Year 2022-2023 Opening Ceremony, Girne, North Cyprus, 22 November, 2022.
- 3. Grout, V. (Keynote Address), "AI in the Real World (or the real world in AI?)", 4th IET Smart Cities Symposium, Bahrain, 21-23 November, 2021.
- 4. Grout, V. (Keynote Address), "Recent Technologies in IoT and its Applications", International Conference on Computational Intelligence and Machine Learning (ICCIML 2021), 31 May-2 June, 2021.
- 5. Grout, V. (Invited Talk), "Machine Learning for Minefield Clearance", University of Bahrain, April 2021.

- 6. "Privacy and Security in Our AI, Big Data, IoT-Connected Future?", IEEE Region 8 International Conference on Computers, Control, Electrical and Electronics Engineering 2019 (ICCCEEE19), Khartoum, Sudan, September 21-23, 2019.
- 7. Grout, V. (Invited Editorial), "No More Privacy Any More", Information (special edition on 'The End of Privacy?'), MDPI, 2019.
- 8. Grout, V. (Invited Paper), "The Singularity Isn't Simple (Whichever way you look at it.) A random walk between science-fiction and science-fact", MDPI Information (Special issue on 'AI and the Singularity: A Fallacy or Great Opportunity?', eds. Logan, R.K. & Braga, A.), 2018.
- Fallacy or Great Opportunity?', eds. Logan, R.K. & Braga, A.), 2018.
 Grout, V. (Keynote Address), "Public Acceptance of Robot Sex", Second International Congress on Love and Sex with Robots (LSR 2016), 19-20 December 2016, Goldsmiths, University of London, UK.
- 10. Grout, V. (Keynote Address), "Surrogate Modelling for Electronic Design Automation", 4th International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2016), Girne, North Cyprus, 2-4 November, 2016.
- 11. Grout, V. (Keynote Address), "The 'Prof on a Train' Game", First IEEE Workshop on Social Implications of Technology (SSIT 2015), Wrexham, Wales, UK, 10th September, 2015.
- 12. Grout, V. (Editorial), "Robot Sex: Ethics and Morality", Lovotics, Vol. 3, Issue 1, February 2015.
- 13. Grout, V. (Keynote Address), "Getting the AI Balance Right", 2nd International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2014), Girne, North Cyprus, 5-7 November, 2014.
- 14. Grout, V. (Editorial), "Shazam for People?", Journal of Robotics & Automation, Vol. 1, Issue 1 (Inaugural Issue), 2014.
- 15. Grout, V. (Professorial Lecture), "No More Secrets Any More? Where is 'Big Connectivity' taking us?", Wrexham Science Festival 2014, 21st July, 2014, Wrexham, UK.
- 16. Grout, V., (Keynote Address), "Life's a RIoT with Spy vs Spy: Looking forward to the 'Real' Internet of Things, the 'Internet of Everything', 'Big Data' and 'Big Connectivity'", 10th International Network Conference (INC 2014), 8-10 July 2014, Plymouth, UK...
- 17. Grout, V. (Public Lecture), "What Happens When the Internet Wakes Up? And other big technological questions for the 21st century!", Wrexham Universities Week 2014, 11th June, 2014, Wrexham, UK.
- 18. Grout, V., (Invited Talk), "Social Fallout from the 'Internet of Everything", IEEE-SSIT Special Session on The Impact of Evolving Technologies on Future Society, 28th May 2014, Glyndŵr University, Wrexham, UK.
- 19. Grout, V., (Invited Talk), "Social Effects of the Old and New Computing Curriculum in Schools", IEEE-SSIT Special Session on The Impact of Evolving Technologies on Future Society, 28th May 2014, Glyndŵr University, Wrexham, UK.
- 20. Grout, V. (Invited Talk), "Big Problems with Big Data", Moscow Bauman State University, 29th April, 2014, Moscow, Russia.
- 21. Grout, V. (Invited Talk), "Is 'Big Connectivity a New Threat?", Moscow Power Engineering Institute, 28th April, 2014, Moscow, Russia.
- 22. Grout, V. (Invited Talk), "What Happens when We Mix the 'Internet of Everything' with 'Big Data'?", Moscow Institute of Electronic Technology, 25th April, 2014, Moscow, Russia.
- 23. Grout, V. (Keynote Address), "'Internet of Everything' + 'Big Data' = 'Big Connectivity'", International Conference on Enterprise Engineering and Knowledge Management, 24-24 April, 2014, Moscow, Russia.
- 24. Grout, V. (Public Lecture), "The 'Internet of Things' and other Thoughts on 'Big Connectivity'", Chester and North Wales British Computer Society (BCS) AGM, 18th September 2013, Chester, UK.
- 25. Grout, V. (Public Lecture), "The Internet of Things: Simple concept astonishing possibilities", Wrexham Science Festival 2012, 18-27 July 2012, Wrexham, UK.
- 26. Davies, J.N., Grout, V. & Rvachova, N., "Terrain Modeling for IEEE 802.11n Networks", Proceedings of the Seventh International Conference on Mathematical Modeling and Simulation of Systems (MODS'2012), 25-28 June 2012, Chernihi-Zhukin, Ukraine, pp219-222.
- 27. Grout, V., (Invited talk), "The Evolving Internet: Where next?", Institution of Engineering and Technology (IET) South Wales Network, Cardiff, 6th December 2011.
- 28. Grout, V. (Public Lecture), "Dawn of the Intelligent Machines", Wrexham Science Festival 2011, 14-22 July 2011, Wrexham, UK.
- 29. Grout, V. (Invited Talk), "Mind the Gap: Theory and Practice in Internet Configuration", Institution of Engineering and Technology (IET) Mersey and Western Cheshire Network, Birkenhead, 31st May 2011.
- 30. Grout, V. (Keynote Address), "The Internet: A difficult beast to control?", 31st IASTED International Conference on Modelling, Identification and Control (MIC 2011), Innsbruck, Austria, February 14-16, 2011.
- 31. Grout, V. (Keynote Address), "Thoughts and Experiences in Internet Optimization", Second IARIA International Conference on the Evolving Internet (INTERNET 2010), September 20-25, 2010, Valencia, Spain.
- 32. Grout, V. & Picking, R., (Public Lecture) "Assistive Technologies: Using I.T. to keep people independent", Wrexham Science Festival, 1st-10th July 2010, Wrexham, UK.

- 33. Grout, V., (Invited Talk) "An Overview of Computational Complexity and a Discussion of the Limitations of Computers", Interdisciplinary Colloquium Series, University of Applied Sciences, Bielefeld, Germany, 18th May 2010.
- 34. Grout, V. (Keynote Address), "'Optimizing the Internet': What does it mean, and can it be done?", Combined Conference on Advances in Telecommunications, Web Applications, Web Monitoring and Protection (WebTel 2010), May 9-15, 2010, Barcelona, Spain
- 35. Grout, V., "How Hard Can it Be? A gentle overview of complexity theory and the limitations of computers", Inaugrual Professorial Lecture, Glyndŵr University, Wrexham, Wales, UK, 25th June 2009.
- 36. Grout, V. (Invited Talk), "The Evolving Internet", Institution of Engineering and Technology (IET) Power Group, Capenhurst, 9th April 2009.
- 37. Grout, V., "Complexity Issues in Traffic Management" (Keynote Address), 1st International Workshop on Traffic Engineering, Modelling, Analysis, Control and Simulation (TEMACS'09), Rome, Italy, 2-6 March 2009 (part of 2nd International Conference on Simulation Tools and Techniques - SIMUTools'09)
- 38. Grout, V., "So Many Paths! (A stroll through the minefield separating Internet theory from practice.)", (Keynote Address), International Conference E-Activity and Leading Technologies (E-ALT'07), Porto (Oporto), Portugal, 3-6 December 2007.
- 39. McGinn, J., Picking, R., Picking, L. & Grout, V. "The Use of Interactive Visual Metaphors to Enhance Group Discussions using Mobile Devices". (invited paper) Proceedings of the 12th IEEE International Conference on Human-Computer Interaction (HCI 2007), Beijing, China, 22-27 July 2007.
- 40. Grout, V. & Cunningham, S. (Invited Talk) "Optimising Internet Access Control Lists", Department of Computer Science and Engineering, University of Nevada, Reno, USA, 15th November 2006.
- 41. Grout, V, "Real-Time Network Optimisation" (invited talk), APMOD 2004 Seventh Applied Mathematical Programming and Modelling Conference, Brunel University, Uxbridge, Middlesex, 20th-23rd June 2004.
- 42. Grout, V, "Internet Traffic Policies and Routing" (invited talk), APMOD 2004 Seventh Applied Mathematical Programming and Modelling Conference, Brunel University, Uxbridge, Middlesex, 20th-23rd
- 43. Grout, V., "An NP-Complete Problem in Wireless Networking: Theory and Practice" (Keynote Address), Proceedings of the International Conference on Modeling and Optimization, MODOPT 2004, Temuco, Chile, 19th-22nd January 2004.
- 44. RESEARCH LETTERS
- 45. Grout, V., "Maths and Computer Science", Mathematics Today (Institute of Mathematics and its Applications), August 2016.

8. **Scientific Projects (Funded)**

- 1. 'Welsh ICT/Computing Teachers' Summer School', Google Research, \$25,000 Google 'Computer Science for High School (CS4HS) Award, April 2014.
- 'Research and Innovation Award', HPC Wales, £78,000 High Performance Computing Wales, April 2014.
- 3. 'A Mobile Lego NTX Programming Lab for Schools', British Computer Society (BCS) £1,000 BCS Turing Educational Awards, June 2012.
- 'Optimised Database Design with Distributed Security', Motorkwik, Ltd., £133,000 Prince of Wales Innovation Scholarship (POWIS), November 2010.
- 'Efficiency Map Software for Electric Motor Design', Motor Design Ltd., £45,000 (Shorter) Knowledge Transfer Partnership (KTP), September 2010.
- 6. Conference Travel Grant, £1,100 Royal Academy of Engineering (RAEng), May 2010.
- 7. 'Control Software for Motor Simulation and Modelling' Motor Design Ltd., £141,000 Knowledge Transfer Partnership (KTP), November 2007.
- 'Low Cost Advanced White Goods for a Longer Independent Life of Elderly People', €2,200,000 (EASY-LINE+) (EU FP6 ICT 2.6.2 #045515) European Commission 6th Framework Programme, Information Society Technologies, January 2007.
- 'Adaptive e-Learning Development', MDP Ltd. £141,000 Knowledge Transfer Partnership (KTP), November 2006.
- 10. 'Data Archiving and Retrieval', tsaAdvet Ltd, £94,000 Knowledge Transfer Partnership (KTP), October
- 11. 'Medical Analysis Database' Logicol Ltd, £94,000 Knowledge Transfer Partnership (KTP), October 2004
- 12. 'Network Routing Project', £20,000 Science Research Investment Fund (SRIF), August 2004
- 13. 'Techniques for Distributed Routing Optimisation with Fault Tolerance' £125,000 PhD Sponsorship, 1998
- 14. 'Integrated Network Solutions Routing Analysis' £75,000 PhD Sponsorship, 1996
- 15. 'Traffic Measurement and Simulation', £55,000 PhD Sponsorship, 1991.
 16. Secured British Computer Society (BCS) funding for three student prizes to be awarded at University of Bangor, University of Chester and Glyndŵr University for the three years 2004, 2005 & 2006 (£1,125) and again for 2007, 2008 & 2009 (£1,545), then annually (£450) from 2010 onwards.

9. Aministrative Roles

| Title | Institution | Year |
|-------------------|---------------------------------|-----------|
| Dean of Research | Wrexham Glyndwr University | 2010-2014 |
| Head of Computing | Wrexham Glyndwr University | 2011-2014 |
| Chair | Welsh Council of Professors and | 2014-2020 |
| | Heads of Computing | |

Director of Centre for Applied Internet Research – 14/12/2006-31/07/2008

Professor of Network Algorithms – 01/08/2008-30/06/2011

Academic Leader for Computing – 01/07/2011-31/10/2012

Academic Head of Computing - 01/11/2012-31/07/2014

Associate Dean for Research and Enterprise – 01/04/2010-31/07/2014

Professor of Computing Futures – 01/08/2014-13/02/2022

10. Memberships in Scientific and Professional Organizations

CHARTERED FELLOWSHIPS AND SENIOR MEMBERSHIPS (PRIOR TO RETIREMENT)

F.R.S.A.

Fellow of the Royal Society of Arts

C.Math., F.I.M.A.

Chartered Mathematician and Fellow of the Institute of Mathematics and its Applications

C.I.T.P., C.Sci., C.Eng., F.B.C.S.

Chartered Scientist, Chartered Engineer and Fellow of the British Computer Society (Chartered Information Technology Professional)

Member of the BCS Effective Leadership in Information Technology (Elite) group.

C.Eng., F.I.E.T.

Chartered Engineer and Fellow of the Institute of Engineering and Technology (Chartered Electrical Engineer) S.M.I.E.E.E.

Senior Member of the Institute of Electrical and Electronics Engineers

S.M.A.C.M.

Senior Member of the Association for Computing Machinery.

M.L.M.S.

Member of the London Mathematical Society.

OTHER SIGNIFICANT PROFESSIONAL MEMBERSHIPS

Committee Member of the Council of Professors and Heads of Computing (CPHC)

Chair of CPHC Wales

Member of the BCS Information Privacy Expert Panel (IPEP)

Member of the Institute of Electrical and Electronics Engineers Communications Society (IEEE CommSoc)

Member of the Institute of Electrical and Electronics Engineers Computer Society (IEEE CompSoc)

Member of the Institute of Electrical and Electronics Engineers Society on Social Implications of Technology (IEEE SSIT) (UK & NI Committee)

Member of the BCS Specialist Group on Assistive Technology

Member of the BCS Education and Training Forum

Member of the BCS Engineering and Technology Forum

Member of the BCS Specialist Group on the Internet

Member of the BCS Cybercrime Forensics Member Group

Member of the BCS Sociotechnical Member Group

Member of the BCS Information Security (ISSG) Member Group (Committee member)

Member of the BCS Green IT Member Group

Member of the BCS ICT Ethics Member Group

Member of the European Chapter on Combinatorial Optimisation (ECCO)

Member of the Institute for Operations Research and Management Science (INFORMS)

Member of the International Society for Computers and their Applications (ISCA)

Member of the Welsh Institute of Mathematical and Computational Sciences (WIMCS)

Member of the Institute for Operations Research and Management Science (INFORMS) Computing Society

Member of the European Internet of Things Council

11. Awards

JOURNAL EDITORIAL BOARDS

Guest Co-Editor for special issue of *Information (Advanced Machine Learning and Data Mining: A New Frontier in Artificial Intelligence Research)*, MDPI Publishing, 2021.

Editorial Board Member for The International Journal of Computers and Their Applications, from 2020.

Guest Editor for special issue of Information (The End of Privacy?), MDPI Publishing, 2019.

Editorial Board Member for Transactions on Leading-edge Synergistic Robots, MIT, from 2018.

Editorial Board Member for the African Journal of Science and Nature, from 2017.

Editorial Board Member for Computer Science for the *Herald of the Bauman Moscow State Technical University Journal, Instrument Engineering Series*, from 2015.

Member of the Editorial Board for the *Moscow Institute of Power Engineering (National Research University) Scientific Magazine*, from 2015.

Editorial Board Member of the Journal of Robotics & Automation, from 2014.

Associate Editor for the International Society for Computers and their Applications (ISCA) *International Journal of Computers and their Applications*, from 2013.

Member of the Editorial Board for Lovotics, OMICS Publishing Group, from 2013.

Member of the Editorial Board for the Journal of Modern Internet of Things (MIOT), from 2013.

Editorial Board Member for the *International Journal of Computers Communication Networks and Circuit Systems*, from 2013.

Editorial Board Member for the Journal of Technology and Optimization, from 2013.

Editorial Board member for the *Journal of Advanced Internet of Things*, Columbia International Publishers, from 2012.

Editorial Board member for the Journal on Advances in Intelligent Systems, from 2012.

Guest Editor (with Picking, R.) for special issue of *Future Internet (Selected Papers from ITA 11)*, MDPI Publishing, Basel, Switzerland, ISSN 1999-5903, 2012.

Editorial Board member for the Journal on Advances in Software, from 2012.

Editorial Board member for the Journal on Advances in Internet Technology, from 2012.

Editorial Board Member for Cognitively Informed Interfaces, IGI Global, 2011-2012.

Editorial Board member for the Journal on Advances in Telecommunications, from 2012.

Editorial Board member for the Journal on Advances in Networks and Services, from 2012.

External Editor for MDPI Open Access, from 2011.

Editor-in-Chief for the International Journal of Computing and Applications (IJCA), from 2010.

Member of the Editorial Board of iBusiness (iB) (Scientific Research), from 2010.

Member of the Editorial Board of the (Scientific Research) Journal of Information Security (JIS), from 2010.

Editorial Board Member of the Journal of Intelligent Control and Automation (ICA), from 2010.

Editor for The Open Information Systems Journal, Bentham Open Publishers, from October 2008.

Co-Editor for the International Journal on Computer Science and Network Security, from January 2007.

Editorial Advisor for Pearson Educational, 2003-present.

JOURNAL REFEREEING

Reviewer for the Journal of Expert Systems With Applications, from 2021.

Reviewer for the Journal of Computational Design and Engineering (Oxford), from 2021.

Reviewer for IEEE Access, from 2020.

Referee for IEEE Journal of Optical Communications, from 2019.

Reviewer for (Springer) International Journal of STEM Education, from 2019.

Referee for IEEE Transactions on Industrial Electronics, from 2019.

Reviewer for (Springer) Transactions on Computational Science, from 2019.

Referee for the *Telematics and Informatics* Journal (*Elsevier*), from 2018.

Reviewer for Complexity (Hindawi), from 2018.

Reviewer for Computers (MDPI), from 2018.

Reviewer for Mechanics of Advanced Materials and Structures (Taylor and Francis), from 2018.

Reviewer for Information (MDPI), from 2018.

Reviewer for Transactions on Computational Science, from 2017.

Referee for IEEE Transactions on Circuits and Systems, from 2016.

Referee for IEEE Transactions on Education, from 2015.

Reviewer for Sciencia Iranica: International Journal of Science and Technology, from 2015.

Referee for EURASIP Journal on Wireless Communications and Networking (Springer), from 2014.

Referee for The Autosoft Journal, from 2014.

Reviewer for ACM Transactions on Intelligent Systems and Technology, from 2013.

Reviewer for *The Computer Journal* (British Computer Society: BCS), from 2013.

Review Panel Member for IET Journal of Engineering, from 2013.

Reviewer for IEEE Transactions on Systems, Man and Cybernetics, from 2013.

Reviewer for IET Wireless Sensor Systems, from 2013.

Reviewer/referee for ACM Transactions on Autonomous and Adaptive Systems, from 2012.

Reviewer for the (Elselvier) Computer Networks Journal (ISSN: 1389-1286) from 2012.

Reviewer for the International Journal of Ad Hoc and Ubiquitous Computing, from 2012.

Reviewer for the *Progress in Electromagnetic Research* Journal, from 2011.

Referee for the (Springer-Verlag) Transactions on Computational Science, from 2010.

Reviewer for the *IETE Technical Review*, from 2010.

Referee for the Journal of Control and Cybernetics, May 2008 onwards.

Referee for Wiley International Journal of Network Management, April 2008 onwards.

Referee for Mathematics and Computers in Simulation journal (Elsevier), April 2008 onwards.

Referee for 'Journal of Active and Passive Network Components' from April 2007.

Reviewer for the Journal of Medical Informatics and the Internet in Medicine (Taylor & Francis), from 2006.

Referee for the *Journal of Heuristics* (Springer-Verlap) from 2006.

Referee for IEEE/ACM Transactions on Networking, from 2005.

PREVIOUS (Pre-2003)

Editorial board member, referee and reviewer for seventeen journals

SERVICE FOR PROFESSIONAL BODIES

Advisory Board Member for the IEEE/ACM Survey on Connected Vehicles, 2013/2014.

Member of the BCS Community of Interest (CoI) for the Internet of Things(IoT), from 2013.

Institute of Engineering and Technology (IET) Technical Assessor (Membership), from 2013.

Member of the Digital Policy Alliance Internet of Things Working Group, from 2013

Member of the *Institute of Electrical and Electronic Engineers (IEEE) Society on Social Implications of Technology (SSIT)*, from 2011.

Member of the VRLink Special Interest Group (VRLINK SIG) from 2009.

Member of the British Computer Society (BCS) Internet Specialist Group, from November 2009.

Member of the *British Computer Society (BCS) Specialist Group on Assistive Technologies*, from November 2009. *Institution of Engineering and Technology (IET)* Recommended Speaker, from 2009.

British Computer Society (BCS) Chartered Information Technology Professional (CITP) Assessor, from 2009. Member of the Institute of Electrical and Electronic Engineers (IEEE) Committee on Network Operations and Management (CNOM), from 2005.

CONFERENCE CHAIRING AND DIRECT ORGANISATION

Special Advisor for the 2021 International Conference on Computational Intelligence in Machine Learning (ICCIML), 1-2 June, 2021, Bengaluru, Malaysia.

Honorary Conference President of the *Seventh International Conference on Internet Technologies and Applications* (*ITA 17*), September 12-15, 2017, Wrexham, UK.

Co-Chair of the Fourth International Workshop on Collaboration and Virtual Environments (CoVE-2016), part of the ACM/IEEE/IFIP 2016 International Conference on Collaboration Technologies and Systems (CTS 2016), Orlando, Florida, USA, October 31-November 4, 2016.

Honorary Conference President of the *Sixth International Conference on Internet Technologies and Applications* (*ITA 15*), September 8-11, 2015, Wrexham, UK.

Co-Chair of the *Third International Workshop on Collaboration and Virtual Environments (CoVE-2015)*, part of the *ACM/IEEE/IFIP 2015 International Conference on Collaboration Technologies and Systems (CTS 2015)*, Atlanta, Georgia, USA, June 1-5, 2015.

Chair of the Advisory Board and International Liaison Advisor for the 2014 Advancement in Information Technology Conference (ADVCIT 2014), Bandung, Malaysia, 29-31 December 2014.

Organising Committee Member for the *First International Congress on Love and Sex with Robots*, November 11, 2014, Part of the 11th ACM International Advances in Computer Entertainment Technology Conference (ACE 2014), Funchal, Madeira, Portugal.

Organising Committee Member for the *IEEE-SSIT Workshop on the Impact of Evolving Technologies on Future Society: Glyndwr/Staffordshire Universities Joint Researcher Development Conference*, 28th May 2014, Wrexham, UK.

Honorary Conference President of the *Fifth International Conference on Internet Technologies and Applications* (*ITA 13*), September 10-13, 2013, Wrexham, UK.

Conference Co-Chair for the First International Internet Conference on Computing (IIOCC '11), 23-25 September 2011.

Conference Chair for the Fourth International Conference on Internet Technologies and Applications (ITA 11), Wrexham, North Wales, UK, 6th-9th September 2011.

Co-Chair of the *Fifth Collaborative Research Symposium on Security, E-learning, Internet and Networking (SEIN 2010)*, 11-15 November 2009, Darmstadt, Germany.

Co-Chair of the Second IEEE Workshop on War and Peace Driving (Wireless Security and Public Uptake) (WPD 2009), 12th October 2009, Marrakech, Morocco (part of the 5th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2009)).

Conference Chair for the *Third International Conference on Internet Technologies and Applications (ITA 09*), Wrexham, North Wales, UK, 8th-11th September 2009.

Co-Chair for the 5th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2009), Marrakech, Morocco, 12-14 May 2009.

Co-Chair of the *IEEE International Workshop on War & Peace Driving (Wireless Security and Public Uptake)*, WPD(WSPU)WiMob'2008, Avignon, France, 12-14 October 2008.

Special session organizer: *Affordable Assistive Technologies*, part of the *IASTED International Conference on Assistive Technologies* (AT 2008), Baltimore, Maryland, USA, April 16-18.

Conference Co-Chair for the *First EU Workshop on Emergent Technology for Assisted Living (ETAL'07)*, September 20-21 2007, Wrexham, UK.

Conference Chair for the *Second International Conference on Internet Technologies and Applications (ITA 07)*, Wrexham, North Wales, UK, 4th-7th September 2007.

Special Session Organiser, "Emergent Technologies for Assisted Living", *Second International Conference on Internet Technologies and Applications (ITA 07)*, Wrexham, North Wales, UK, 4th-7th September 2007.

Co-chair of the First International Workshop on Ambient Intelligence and Assistive Technologies for the Elderly and Disabled (AIATED'07), Wrexham, North Wales, UK, 19-20 July 2007.

Conference Co-Chair for the 3rd IEEE International Conference on Autonomic and Autonomous Systems (ICAS 2007), June 19-25 2007, Athens, Greece.

Conference Co-Chair for the 1st IEEE International Workshop on Knowledge-based User Interface (KUI 2007), June 19-25 2007, Athens, Greece.

Special Session Organiser: "The Future of Internet Routing" at the IASTED International Conference on Internet and Multimedia Systems and Applications (EuroIMSA 2006), Innsbruck, February 13-15, 2006.

Conference Chair for the *first International Conference on Internet Technologies and Applications (ITA 05*), Wrexham, North Wales, 7th-9th September 2005

RECENT (EXTERNAL) RESEARCH EXAMINATIONS

University of Plymouth, PhD (2020), "User Profiling based on Network Application Traffic modelling" (Dr. Faisal Shaman)

COE Karpagam University, Coimbatore., PhD (2109), "Innovative Hybrid Coding Approach to Biomedical Image Compression", India. (Dr. S.S. Magar)

Karpagam Academy of Higher Education., PhD (2109), "Secure Localization in Wireless Sensor Networks", Tamil Nadu, India. (Dr. N.A. Natrij)

University of Plymouth, PhD (2018), "Bioelectrical User Authentication" (Dr. Timibloudi Enamamu)

Kumaraguru College of Technology, Coimbatore, India, PhD (2018) "Certain Investigations on Utility of Genetic Algorithm Based Routing Optimization Schemes for Performance Enhancement in MANETs" (Dr. K.B. Gurumoorthy)

Anna Government College of Technology, Coimbatore, India, PhD (2017), "Efficient Fault Localization using Active Diagnosis Risk Modeling and Fault Management in Communication Networks" (Dr. K. Sashirekha) Bangor University, MRes (2016), "Immutable Data for Effective State Synchronisation" (Dan Prince) University of Plymouth, PhD (2015), "Secure Tracking System for Next Generation CIT Products" (Dr. Chris

Kosmas)

Swansea Metropolitan University of Wales Trinity St. David, Ph.D (2014), "An Ant Colony Algorithm for Routing in Ad Hoc Wireless Sensor Networks" (2014)

University of Alcalá, Madrid, Spain, PhD (2013), "Semantic Web Ontologies for the Internet of Things", 2013. University of Zaragoza, Spain, PhD (2013), "A Smart Kitchen for Ambient Assisted Living" (Dr. Rubén Blasco Marín)

National University of Ireland, Galway, PhD (2012), "StoRHm: A Protocol Adapter for Mapping SOAP-based Web Services to RESTful HTTP Format" (Dr. Sean Kennedy)

Anna Government College of Technology, Coimbatore, India, PhD (2011), "A Trust-based Distributed Authentication Protocol for Security in Mobile Ad-hoc Networks" (Dr. A. Rajaram)

University of Bradford, PhD (2010), "Localised Quality of Service Routing Algorithms for Flat and Hierarchical Communications Networks" (Dr. Elmabrook Mustafa)

Anglia Ruskin University, Cambridge, PhD (2008), "The Innovative Design and Development of Web Services for Visually Impaired" (Dr. Mukhtar Masood Rana)

University of Plymouth, PhD (2007), "Dynamic Adaptation of MPEG-4 for the Streaming of Real-time e-Learning Videos over the Internet" (Dr. Aruna Thakur)

(Approximately twenty-five internal examinations and vivas chaired in other subjects.)

PREVIOUS (Pre-2005)

Ten external PhD examinations.

OTHER VISITING PROFESSOR/LECTURER/RESEARCHER ROLES CURRENT/RECENT

University of Applied Sciences, Bielefeld, Germany, Research seminars, 2010/12. University of Oviedo, Spain, Research seminars, 2010.

University of Cardiff, Cardiff School of Mathematics. Welsh Institute of Mathematical and Computational Sciences (WIMCS) seminar, 2010.

International Advisor at GreenTech Institute, Bangladesh, from 2010

University of Plymouth. M.Sc. Internet Technologies and Applications, Research seminars, 2005-2009

University of Reno, Nevada, USA, PhD Research seminars, 2006.

University of Surrey. MSc Research seminars, 2006

PREVIOUS

Twelve other similar roles since 1995.

OTHER EXTERNAL ROLES

Vice Chair of the European Commission (EC) Horizon Europe Pathfinder and Transitions Panels from 2022-2025, ongoing.

Ethics Advisor for the European Commission (EC) Horizon Europe Programmes from 2022.

Member of the Science, Technology, Engineering and Mathematics (STEM) Selection Panel for the Research Fellow Scheme/Senior Research Fellow Scheme (RFS/SRFS) of the Research Grants Council (RGC) of Hong Kong, from 2021

New European Union/European Commission Horizon 2020 Expert roles to add ... 2020/2021 ...

European Union/European Commission *Horizon 2020* Expert Ethics Screener, Reviewer and Assessor for *H2020-SMEINST-2-2017-8*, from 2018.

Panel member/expert reviewer for the European Commission: Horizon 2020 (H2020) SC1-DTH-03-2018: *Adaptive smart working and living environments supporting AHA* (*DTH-03*) H3 – E-Health, Well-being and Ageing, Brussels, June 17-21, 2018.

Vice Chair of the European Commission: Horizon 2020 (H2020) *Future and Emerging Technologies (FET)* Unit of the Research Executive Agency (REA) evaluation panel for the call: 2014 FET-OPEN - Novel Ideas for Radically New Technologies - Research Projects (H2020-FETOPEN-2017-RIA), Fifth Cut-off, January-April, 2017.

European Union/European Commission *Horizon 2020* Expert Ethics Screener, Reviewer and Assessor for *H2020-SMEINST-2-2016-7*, from 2017.

Member of the Economic and Social Research Council (ESRC) Commissioning Panel for the *Ways of Being in a Digital Age Scoping Review*, June 2016.

Vice Chair of the European Commission: Horizon 2020 (H2020) Future and Emerging Technologies (FET) Unit of the Research Executive Agency (REA) evaluation panel for the call: 2014 FET-OPEN - Novel Ideas for Radically New Technologies - Research Projects (H2020-FETOPEN-2016-RIA), Fourth Cut-off, May-July 2016.

European Union/European Commission *Horizon 2020* Expert Ethics Screener, Reviewer and Assessor for *H2020-SMEINST-2-2015-6*, from 2016.

Member of the *IEEE SCC42* (*IEEE Standards Coordinating Committee on Transportation*) *AG1 Global Policy Advisory Group*, from 2015.

Committee member of the BCS Information Security Specialist Group (ISSG), from 2015.

Strategic advisor for the *Economic and Social Research Council (ESRC)* "New Ways of Living and Working in a Digital Age" research programme (Society and Global Security/ESRC UK in a Changing Europe project), from 2015

Member of the British Computer Society Information Privacy Expert Panel (IPEP), from 2015.

Vice Chair of the European Commission: Horizon 2020 (H2020) Future and Emerging Technologies (FET) Unit of the Research Executive Agency (REA) evaluation panel for the call: 2014 FET-OPEN - Novel Ideas for Radically New Technologies - Research Projects (H2020-FETOPEN-2015-RIA), Third Cut-off, September 2015 – January 2016.

External Expert Grant Reviewer for the Research Grants Council (RGC) of Hong Kong, from 2015.

European Union/European Commission *Horizon 2020* Expert Ethics Screener, Reviewer and Assessor for *H2020-SMEINST-2-2014-5*, from 2015.

Vice Chair of the European Commission: Horizon 2020 (H2020) Future and Emerging Technologies (FET) Unit of the Research Executive Agency (REA) evaluation panel for the call: 2014 FET-OPEN - Novel Ideas for Radically New Technologies - Research Projects (H2020-FETOPEN-2014-RIA), Second Cut-off, February-July 2015.

European Union/European Commission *Horizon 2020* Expert Reviewer for *H2020-PHC-25 "Advanced ICT Systems and Services for Integrated Care"*, from 2015.

Member of the European Internet of Things Council, from 2015

Invited contributor to 'Runaview' (http://www.runaview.com/, https://www.facebook.com/Runaview & https://twitter.com/Runaview) as "bringing together 1000 of the UK's most entertaining and dynamic personalities", from April 2015.

Core member of the North Wales Police Cyber Crime Trust Group, from February 2015.

Vice Chair of the European Commission: Horizon 2020 (H2020) Future and Emerging Technologies (FET) Unit of the Research Executive Agency (REA) evaluation panel for the call: 2014 FET-OPEN - Novel Ideas for Radically New Technologies - Research Projects (H2020-FETOPEN-2014-RIA), First Cut-off, September 2014-January 2015. (Welsh Government funded) *TechnoCamps* North-East Coordinator (Glyndŵr University: Wrexham, Flintshire and Denbighshire Schools), from 2014.

Expert member of the North Wales Police Cyber Crime Group, from December 2014.

European Union/European Commission *Horizon 2020* Expert Screener and Reviewer for *Galileo-2014-1*, from 2014.

European Union/European Commission *Horizon 2020* Member of the Expert Consultation Panel on *The Future of ICT for Creativity and the Creative Industries*, from 2014.

Member of the University of Alcalá (Madrid, Spain) *Committee of International Experts* (PhD evaluation), from 2013.

European Commission Framework 7 Information and Communication Technology (FP7-ICT-2011) Expert Assessor, from 2011.

Leverhulme Trust Grant Application Reviewer, 2010-present

Member of the Advisory Committee for the *International Association for Computer Scientists and Engineers* (*IACSE*), from 2010.

External Advisor, University of Plymouth Professorial and Readership (Academic Promotions) panel, from 2010. Member of the *Westlaw Round Table Expert Witness Group*, from 2010.

European Union Independent Expert for EU Safer Internet Programme 2009-2013.

Expert witness for the *Round Table Group* legal consortium (Reuters), from 2009.

European Union Framework 7 Expert Proposal Assessor, *Information and Communications Technologies (ICT) Policy Support Programme (PSP)*, *Competitiveness and Innovation Framework Programme (CIP)* (2007-2013), *Safer Internet Programme (SIP)* (2009-2013).

Invited judge for the UK Young Scientists' and Engineers' Fair 2009.

European Commission Framework 7 (FP7) Information and Communication Technologies (ICT) project proposal reviewer, from 2008.

European Union project reviewer, referee and advisor, from April 2006.

European Commission Framework 6 (FP6) Information Society Technologies (IST) project proposal reviewer, 2004-2006.

Member of the Network Management Research Group (NMRG) of the Internet Research Task Force (IRTF), from December 2005.

OTHER ELECTED POSITIONS AND COMMITTEE ROLES

Member of the Welsh TechnoCamps Steering Committee. From 2018.

Trustee for the Council of Professors and Heads of Computing (CPHC), from 2014.

Member of the Glyndŵr University Partnerships Approval Panel, from 2014.

Member of the EURIM Digital Policy Alliance (DPA) Internet of Things Working Group, from 2013.

Member of the UK National Committee of the Council of Professors and Heads of Computing (CPHC) (Web Administrator), from 2013.

Institute of Engineering and Technology (IET) Registration Group Technical Assessor, from 2013.

Acting Chair of the Glyndŵr University Research Degrees Committee (RDC), 2013.

British Computer Society (BCS) Programme Accreditation Assessor, from 2012.

Professorial Member of the Glyndŵr University Intellectual Property Evaluation Group (IPEG), from 2012.

Chair of the Council of Heads of Computing in Wales/Cyngor Penaethiaid Cyfrifiadura Cymru (CPCC); the Welsh region of the Council of Professors and Heads of Computing (CPHC), from 2012.

Member of the Council of Professors and Heads of Computing (CPHC)/Computing at School (CAS) [CPHC-CAS] Working Group, from 2012.

Member of the Glyndŵr University IT Strategy Group, from 2012.

Chair of the Glyndŵr University Academic Audit, Admissions Sub-Committee, from 2011.

Member of the *Older People and Ageing Research and Development Network (OPAN Cymru)* Steering Committee, since 2010.

Education Liaison Officer (ELO), British Computer Society (BCS) Chester and North Wales Branch, 2002-present. Member of the Glyndŵr University Senate/Academic Board, 2010-present.

Chair of the Glyndŵr University Research Repository Editorial Standing Committee (RRESC), 2009-present.

Member of the Glyndŵr University Research Degree Awarding Powers (RDAPs) Task and Finish Group/Working Party.

Member of the Engineering Professors' Council (EPC), from 2010.

Member of the Glyndŵr University Research and Scholarship Committee (RSC), 2003-present.

Member of the Glyndŵr University Research Degrees Committee (RDC), 2002-2007 and 2010-present.

Member of the Glyndŵr University Professorial and Readership Committee, 2009-present.

Glyndŵr University Computer Science and Informatics (F23) RAE 2008 coordinator, 2007-2008.

Chair, Glyndŵr University Research Strategy Working Group, 2010-2011.

Member of the WHEB Digital Economy Working Group, from 2011.

Chair, Glyndŵr Institute for Arts, Science and Technology Research and Enterprise Committee, 2010-present.

Vice-Chair, Glyndŵr Institute for Arts, Science and Technology Research Degrees Committee, 2010-present.

Member of the Glyndŵr University School Academic Committee for Graduate Studies, 2010-present.

University of Wales, NEWI coordinator for the ISNRG Network Initiative (with University of Applied Sciences,

Darmstadt, Germany and University of Plymouth, UK) from June 2007.

Member of the International Association for the Development of the Information Society (IADIS)

Member of the International Association of Science and Technology for Development (IASTED)

Member of the International Academy, Research and Industry Association (IARIA)

Member of the IAIRA Scientific Working Group on Special Topics on Systems

Member of the IAIRA Scientific Working Group on Advanced Topics

Member of the IAIRA Scientific Working Group on Autonomic and Autonomous Systems

PREVIOUS

Numerous academic positions and some public, the most significant being elected as Councillor for the City of Plymouth (Mount Gould ward) and serving as Chair of the Leisure/Client Services Committee.

Nominated for the American Biographical Institute Global Prize, 2012.

Accepted for inclusion in Covington Who's Who, from 2012

Listed in the International Dictionary of Professionals, American Biographical Institute, from 2012.

Listed in the C.W.W. directory of *Business Leaders*, from 2012.

The American Biographical Institute's 2011 Man of the Year.

Listed in the American Bibliographical Institute's *Great Minds of the 21st Century*, from 2012.

Winner of the *American Biographical Institute's* Scientific Award of Excellence for 2011.

Winner of the Albert Einstein Award of Excellence 2011, American Biographical Institute, 2011.

Listed in Biltmore Who's Who among Executives and Professionals, from 2011.

Listed in Cambridge Who's Who, from 2010.

Listed in Who's Who Among Executives and Professionals (Empire), from 2010.

Listed in Cambridge Who's Who Among Executives and Professionals, from 2010.

Listed in Who's Who of World Class Business Leaders (World Continental Broadcasting Network), from 2010.

Listed in Marquis Who's Who in Science and Engineering, from 2010.

Listed in Continental Who's Who of World Class Professionals, from 2010.

Listed in *Emerald Who's Who*, 2009 onwards.

Listed in Continental Who's Who from 2009.

Listed in Who's Who in America, 2008 onwards.

Listed in the International Biographical Centre's *The Cambridge Blue Book* from 2008.

Listed in the *Dictionary of International Biography*, 2007 onwards (34th edition)

Listed in Marquis "Who's Who in the World" and "Who's Who in Science and Engineering", 2005/6 onwards.

ALSO SERVED ON OVER 300 INTERNATIONAL PROGRAMME COMMITTEES 2000-2023

12. Please fill in the table below for the courses you have given at the undergraduate and graduate level courses in last two years.

| Academic | Semester | Course Name | Weekly Hour | | Number of |
|----------|----------|---|-------------|----------|-----------|
| Year | | | Theoretical | Practice | Students |
| 2023-25 | Fall | MA Ethics of Technology | 3 | | 1 |
| | | BA Discrete Mathematics | 3 | | 67 |
| | | BA Data Structures and Algorithms | 3 | | 23 |
| | | BA Game History and Analysys | 3 | | 66 |
| | Spring | MA Futurology | 3 | | 4 |
| | | | | | |

| | | BA Creative and Critical Thinking BA Technology Ethics BA Future and Emerging Technology | 3 3 | 27 7 22 |
|---------|--------|--|-------------|---------------------|
| 2024-25 | Fall | MA Ethics of Technology BA Discrete Mathematics BA Mathematics and Geometry for Design BA Game History and Analysys | 3 3 3 | 4 57 18 56 |
| | Spring | MA Futurology BA Creative and Critical Thinking | 3 | 6 51 |
| | | BA Technology Ethics BA Future and Emerging | 3 | 32 |
| | | Technology | 3 | 31 |